



MG29930 | BASAL NUCLEUS, 2 PARTS







This anatomical model, enlarged for ease of study, presents in two parts the basal nuclei and internal capsule of the brain, highlighting structures such as the caudate nucleus, lentiform nuclei, and the knee of the internal capsule. The main structures are numbered and hand-painted with didactic colors, facilitating identification and learning. The model is presented without a support base.

Applications:

Ideal for the study of neuroanatomy in schools, universities, medical and scientific training, patient education, and procedure demonstration. Indicated for the study of the neurological system and training for surgical dissection.

Technical Advantages:

- * Detailed representation of the structures of the basal nuclei and internal capsule.
- * Numbering and hand-painting of structures for easy identification.
- * High-precision natural molding.
- * Manufactured from resistant and durable synthetic material.



- * Original replicas, enlarged from natural size.
- * Includes an information card with the related structures.
- * Resin approved in toxicological tests.

3D Technology and Augmented Reality:

Our anatomical models offer a visual complement through information cards that activate 3D models viewable in augmented reality (AR). This interactive platform assists learning, allowing for comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Material: Synthetic resin.
- * Scale: Enlarged from natural size.

Main Structures:

Caudate nucleus: A "C"-shaped structure located deep within the brain, an integral part of the basal ganglia. It is involved in motor control, learning, and memory.

Lentiform nucleus: Composed of the putamen and globus pallidus, the lentiform nucleus is a mass of gray matter located medially to the cortex of the insula. It participates in the planning and execution of movements.

Clastrum: A thin sheet of gray matter located between the cortex of the insula and the lentiform nucleus. Its function is not yet fully understood, but it is believed to be involved in cognitive and emotional functions.

Amygdaloid body: An almond-shaped structure located in the temporal lobe, deeply involved in emotional processing, particularly fear and anxiety.

Temporal lobe: One of the four main lobes of the brain, located below the parietal lobe and behind the frontal lobe. It is involved in hearing, memory, language, and emotional processing.

Hippocampus: A seahorse-shaped structure located in the temporal lobe, crucial for the formation of new memories and spatial navigation.

Insula: A cortical region located deep within the brain, covered by the frontal, parietal, and



temporal lobes. It is involved in various functions, including sensory processing, emotions, and consciousness.

Optic radiation: A bundle of nerve fibers that conduct visual information from the lateral geniculate body to the visual cortex in the occipital lobe.

Fornix: An arched bundle of nerve fibers that connects the hippocampus to the mammillary body of the hypothalamus. Important in memory and other cognitive functions.

Choroid plexus of the lateral ventricle: A network of blood capillaries inside the cerebral ventricles, responsible for the production of cerebrospinal fluid.

Thalamus: A large mass of gray matter located in the diencephalon, acting as a relay station for most sensory information arriving at the cerebral cortex.

Internal capsule: An area of white matter that separates the basal ganglia from the thalamus. It contains important ascending and descending pathways that connect the cerebral cortex to other regions of the nervous system.

Occipital lobe: Lobe located in the posterior part of the brain, responsible for processing visual information.

Other structures can be verified directly on the physical piece or on the interactive 3D model.

About the Anatomical Models:

They are developed with resin replication technology, supplying the scarcity of natural anatomical pieces for teaching and research. They present the essential morphological characteristics with excellent cost-benefit, good resistance, hand painting, and numbering for precise identification of structures.

List of all visible structures:

- Caudate nucleus
- Lentiform nucleus
- Claustrum
- Amygdaloid body
- Temporal lobe
- Hippocampus
- Insula
- Optic radiation
- Fornix



- Choroid plexus of the lateral ventricle
- Thalamus
- Internal capsule
- Occipital lobe
- Occipital lobe
- Temporal lobe
- Hippocampus
- Anterior limb of internal capsule
- Genu of internal capsule
- Claustrum
- External capsule
- Thalamolenticular part
- Retrolenticular part
- Posterior limb of internal capsule
- Auditory radiation
- Sublenticular part
- Optic radiation
- Fornix body
- Choroid plexus of lateral ventricle
- Internal capsule
- Thalamus
- Caudate nucleus
- Lentiform nucleus
- Claustrum
- Amygdaloid body